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Cont  
Li<sub>2</sub>O, Na<sub>2</sub>O or K<sub>2</sub>O; 1-5% K<sub>2</sub>O; 2-9% TiO<sub>2</sub>; and 0-30% (excluding 30%) of at least one RO selected from among BaO, ZnO, and SrO; with the total content of the above-stated components being equal to or more than 95 percent.

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**IN THE SPECIFICATION:**

Please replace paragraph [0012] as follows:

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**Summary of the Invention**

That is, the present invention provides:

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1. An optical glass (referred to hereinafter as optical glass (1)) exhibiting a refractive index in the range of from 1.75 to 2.0, an Abbé number in the range of from 20 to 28.5, and a viscosity at the liquid phase temperature equal to or higher than 0.4 Pa·s.
  2. An optical glass (referred to hereinafter as optical glass (2)) exhibiting a refractive index in the range of from 1.75 to 2.0, an Abbé number in the range of from 20 to 28.5, and a glass transition temperature equal to or less than 540°C.
  3. An optical glass (referred to hereinafter as optical glass (3)) exhibiting a refractive index in the range of from 1.75 to 2.0, an Abbé number in the range of from 20 to 28.5, and a transmittance  $\lambda_{80}$  is equal to or less than 500nm and a transmittance  $\lambda_5$  is equal to or less than 385nm.
  4. The optical glass of any of 1-3 above wherein said optical glass comprising, as molar percentages, 12-34 percent of P<sub>2</sub>O<sub>5</sub>; 0.2-15 percent of B<sub>2</sub>O<sub>3</sub>; 0-25 percent of Nb<sub>2</sub>O<sub>5</sub>; 0-40 percent of WO<sub>3</sub>; 4-45 percent of at least one R'<sub>2</sub>O selected from among Li<sub>2</sub>O, Na<sub>2</sub>O, and K<sub>2</sub>O; and 0-30 percent (excluding 30 percent) of at least one RO selected from among BaO, ZnO,

and SrO; with the total content of the above-stated components being equal to or more than 94 percent.

5. The optical glass of any of 1-3 above wherein said optical glass comprising, as molar percentages, 12-34 percent of  $P_2O_5$ ; 0.2-15 percent of  $B_2O_3$  (where the total quantity of  $P_2O_5$  and  $B_2O_3$  is 15-35 percent); 0-45 percent of  $WO_3$ ; 0-25 percent of  $Nb_2O_5$ ; 0 to 10 percent of  $TiO_2$  (where the total quantity of  $WO_3$ ,  $Nb_2O_5$ , and  $TiO_2$  is 20-45 percent); 0-25 percent of BaO; 0-20 percent of ZnO (where the total quantity of BaO and ZnO is less than 30 percent); 2-30 percent of  $Li_2O$ ; 2-30 percent of  $Na_2O$ ; 0-15 percent of  $K_2O$  (where the total quantity of  $Li_2O$ ,  $Na_2O$ , and  $K_2O$  is 10-45 percent); 0-10 percent of CaO; 0-10 percent of SrO; 0-5 percent of  $Al_2O_3$ ; 0-5 percent of  $Y_2O_3$ ; 0-1 percent of  $Sb_2O_3$ ; and 0-1 percent of  $As_2O_3$ ; where the total quantity of all of the above-listed components is equal to or more than 94 percent.

6. An optical glass comprising, as molar percentages, 15-30 mol percent of  $P_2O_5$ ; 0.5-15 mol percent of  $B_2O_3$ ; 5-25 mol percent of  $Nb_2O_5$ ; 6-40 mol percent of  $WO_3$ ; 4-45 mol percent of at least one  $R'_2O$  selected from among  $Li_2O$ ,  $Na_2O$ , and  $K_2O$ ; and 0-30 percent (excluding 30 percent) of at least one RO selected from among BaO, ZnO, and SrO; with the total content of the above-stated components being equal to or more than 95 percent.

7. An optical glass (referred to hereinafter as optical glass (4)) comprising 15-30 percent of  $P_2O_5$ ; 0.5-15 percent of  $B_2O_3$ ; 5-25 percent of  $Nb_2O_5$ ; 6-40 percent of  $WO_3$ ; 4-45 percent of at least one  $R'_2O$  selected from among  $Li_2O$ ,  $Na_2O$ , and  $K_2O$ ; and 0-30 percent (excluding 30 percent) of at least one RO selected from among BaO, ZnO, and SrO; with the total content of the above-stated components being equal to or more than 95 percent.

8. The optical glass of 7 above wherein said optical glass comprising 0-25 molar percent (excluding 0 molar percent) of BaO.

9. An optical glass (referred to hereinafter as optical glass (5)) comprising 15-30 percent of  $P_2O_5$ ; 0.5-15 percent of  $B_2O_3$ ; 5-25 percent of  $Nb_2O_5$ ; 6-40 percent of  $WO_3$ ; not more than 10 percent of  $TiO_2$ ; 4-45 percent of at least one  $R'_2O$  selected from among  $Li_2O$ ,  $Na_2O$ , and  $K_2O$ ; and 0-30 percent (excluding 30 percent) of at least one RO selected from among BaO, ZnO, and SrO.

B2 10. An optical glass (referred to hereinafter as optical glass (6)) comprising, as molar percentages, 12-34 percent of  $P_2O_5$ ; 0.2-15 percent of  $B_2O_3$  (where the total quantity of  $P_2O_5$  and  $B_2O_3$  is 15-35 percent); 0-45 percent of  $WO_3$ ; 0-25 percent of  $Nb_2O_5$ ; 0 to 10 percent of  $TiO_2$  (where the total quantity of  $WO_3$ ,  $Nb_2O_5$ , and  $TiO_2$  is 20-45 percent); 0-25 percent of BaO; 0-20 percent of ZnO (where the total quantity of BaO and ZnO is less than 30 percent); 2-30 percent of  $Li_2O$ ; 2-30 percent of  $Na_2O$ ; 0-15 percent of  $K_2O$  (where the total quantity of  $Li_2O$ ,  $Na_2O$ , and  $K_2O$  is 10-45 percent); 0-10 percent of CaO; 0-10 percent of SrO; 0-5 percent of  $Al_2O_3$ ; 0-5 percent of  $Y_2O_3$ ; 0-1 percent of  $Sb_2O_3$ ; and 0-1 percent of  $As_2O_3$ ; where the total quantity of all of the above-listed components is equal to or more than 94 percent; a density of oxygen atoms contained is in the range of from  $4.2 \times 10^{22}$  to  $5.2 \times 10^{22}/cm^3$ .

11. An optical glass (referred to hereinafter as optical glass (7)) comprising, as molar percentages, 12-34 percent of  $P_2O_5$ ; 0.2-15 percent of  $B_2O_3$  (where the total quantity of  $P_2O_5$  and  $B_2O_3$  is 15-35 percent); 2-45 percent of  $WO_3$ ; 0-25 percent of  $Nb_2O_5$ ; 0 to 10 percent of  $TiO_2$  (where the total quantity of  $WO_3$ ,  $Nb_2O_5$ , and  $TiO_2$  is 20-45 percent); 0-25 percent of BaO; 0-20 percent of ZnO (where the total quantity of BaO and ZnO is less than 30 percent);

2-30 percent of  $\text{Li}_2\text{O}$ ; 2-30 percent of  $\text{Na}_2\text{O}$ ; 0-15 percent of  $\text{K}_2\text{O}$  (where the total quantity of  $\text{Li}_2\text{O}$ ,  $\text{Na}_2\text{O}$ , and  $\text{K}_2\text{O}$  is 29-45 percent); 0-10 percent of  $\text{CaO}$ ; 0-10 percent of  $\text{SrO}$ ; 0-5 percent of  $\text{Al}_2\text{O}_3$ ; 0-5 percent of  $\text{Y}_2\text{O}_3$ ; 0-1 percent of  $\text{Sb}_2\text{O}_3$ ; and 0-1 percent of  $\text{As}_2\text{O}_3$ ; where the total quantity of all of the above-listed components is equal to or more than 94 percent.

12. An optical glass (referred to hereinafter as optical glass (8)) comprising, as molar percentages, 12-34 percent of  $\text{P}_2\text{O}_5$ ; 0.2-15 percent of  $\text{B}_2\text{O}_3$  (where the total quantity of  $\text{P}_2\text{O}_5$  and  $\text{B}_2\text{O}_3$  is 15-35 percent); 2-45 percent of  $\text{WO}_3$ ; 0-25 percent of  $\text{Nb}_2\text{O}_5$ ; 0 to 10 percent of  $\text{TiO}_2$  (where the total quantity of  $\text{WO}_3$ ,  $\text{Nb}_2\text{O}_5$ , and  $\text{TiO}_2$  is 20-45 percent); 0-11 percent of  $\text{BaO}$ ; 0-20 percent of  $\text{ZnO}$  (where the total quantity of  $\text{BaO}$  and  $\text{ZnO}$  is less than 30 percent); 2-30 percent of  $\text{Li}_2\text{O}$ ; 2-30 percent of  $\text{Na}_2\text{O}$ ; 0-15 percent of  $\text{K}_2\text{O}$  (where the total quantity of  $\text{Li}_2\text{O}$ ,  $\text{Na}_2\text{O}$ , and  $\text{K}_2\text{O}$  is 10-45 percent); 0-10 percent of  $\text{CaO}$ ; 0-10 percent of  $\text{SrO}$ ; 0-5 percent of  $\text{Al}_2\text{O}_3$ ; 0-5 percent of  $\text{Y}_2\text{O}_3$ ; 0-1 percent of  $\text{Sb}_2\text{O}_3$ ; and 0-1 percent of  $\text{As}_2\text{O}_3$ ; where the total quantity of all of the above-listed components is equal to or more than 94 percent.

13. The optical glass of any of 10-12 above wherein said optical glass has the composition comprising, as essential components,  $\text{P}_2\text{O}_5$ ,  $\text{B}_2\text{O}_3$ ,  $\text{WO}_3$ ,  $\text{Nb}_2\text{O}_5$ ,  $\text{TiO}_2$ ,  $\text{BaO}$ ,  $\text{ZnO}$ ,  $\text{Li}_2\text{O}$ ,  $\text{Na}_2\text{O}$  and  $\text{K}_2\text{O}$  or the composition comprising the above essential components and  $\text{Sb}_2\text{O}_3$ .

14. The optical glass of 10 or 11 above wherein said optical glass comprises 0-11 percent of  $\text{BaO}$ .

15. The optical glass of 10 or 12 above wherein said total quantity of  $\text{Li}_2\text{O}$ ,  $\text{Na}_2\text{O}$ , and  $\text{K}_2\text{O}$  is equal to or more than 29 percent.

16. The optical glass of any of 10 to 12 above wherein said optical glass has a density of oxygen atoms contained in the range of from  $4.2 \times 10^{22}$  to  $5.2 \times 10^{22}/\text{cm}^3$ .

17. An optical glass (referred to hereinafter as optical glass (9)) comprising  $\text{P}_2\text{O}_5$ ,  $\text{B}_2\text{O}_3$ ,  $\text{WO}_3$  and an alkali metal oxide, wherein the total quantity of  $\text{P}_2\text{O}_5$  and  $\text{B}_2\text{O}_3$  is 15-35 molar percent and a content of  $\text{WO}_3$  is 2-45 molar percent and a density of oxygen atoms contained ranges from  $4.2 \times 10^{22}$  to  $5.2 \times 10^{22}/\text{cm}$ .

18. The optical glass of 17 above wherein said optical glass comprises 2-30 molar percent of  $\text{Li}_2\text{O}$ .

B2 19. The optical glass of any of 10-18 above wherein said optical glass does not comprise substantial amount of  $\text{GeO}_2$ .

20. The optical glass of any of 10-19 above wherein said optical glass exhibits a glass transition temperature equal to and/or less than  $530^\circ\text{C}$  and a yield point temperature equal to or less than  $580^\circ\text{C}$ .

21. The optical glass of any of 10-20 above wherein said optical glass exhibits a refractive index in the range of from 1.7 to 2.0, an Abbé number in the range of from 20 to 32.

22. The optical glass of any of 10-20 above wherein said optical glass exhibits a liquid phase temperature equal to or less than  $970^\circ\text{C}$ .

23. An optical part being composed of the optical glass of any of 1-22 above.

24. A glass preform being composed of the optical glass of any of 1-22 above.

25. A method of manufacturing glass preforms wherein a prescribed amount of a piece of molten glass flowing out of a flowout pipe is received in a receiving mold to prepare a glass preform made of the optical glass of any of 1-22 above.

26. A method of manufacturing glass preforms made of the optical glass of any of 1-22 above, comprising the steps of :

a molten glass glob is made to fall by causing molten glass flowing out of a flowout pipe to drip naturally or by cutting with a cutting blade;

the molten glass glob is received in a depression in a forming mold, and in the process, air, a nonreactive gas or some other gas is blown out through minute holes in the depressions; and,

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a layer of air is generated between the molten glass glob and the inner surface of depression in the forming mold and the molten glass glob is maintained and cooled within the depression in a state of essential non-contact with the inner surface of the depression until at least a portion of the outer surface of the molten glass glob reaches a temperature not greater than the melting temperature.

27. A method of manufacturing glass products comprising the steps of :

heating the glass preform of 24 above or the glass preform prepared by the method of 25 above and

precisely press molding the heated glass preform to obtain a glass product.

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**IN THE CLAIMS:**

Please cancel Claims 4-10, 13-16 and 64, without prejudice or disclaimer.

Please replace Claims 1-3, 11, 17-19, 59-63, 65-72, 74-76, 78-80, 85, 87-90, 95, 97-100, 105 and 106 as follows:

1. (Amended) The optical glass of claim 11 exhibiting a refractive index in the range of from 1.75 to 2.0, an Abbé number in the range of from 20 to 28.5, and a viscosity at a liquid phase temperature equal to or higher than 0.4 Pa·s.

2. (Amended) The optical glass of claim 108 exhibiting a refractive index in the range of from 1.75 to 2.0, an Abbé number in the range of from 20 to 28.5, and a glass transition temperature equal to or less than 540°C.

3. (Amended) The optical glass of claim 109 exhibiting a refractive index in the range of from 1.75 to 2.0, an Abbé number in the range of from 20 to 28.5, and a transmittance  $\lambda$  80 is equal to or less than 500nm and a transmittance  $\lambda$  5 is equal to or less than 385 nm.

11. (Amended) An optical glass comprising as molar percentages, 15-30 percent of  $P_2O_5$ ; 0.5-15 percent of  $B_2O_3$ ; 5-25 percent of  $Nb_2O_5$ ; 6-40 percent of  $WO_3$ ; 4-45 percent of at least one  $R'_2O$  selected from the group consisting of  $Li_2O$ ,  $Na_2O$ , and  $K_2O$ , 1-5 percent of  $K_2O$ ; 0-30 percent (excluding 30 percent) of at least one RO selected from the group consisting of  $BaO$ ,  $ZnO$ , and  $SrO$ ; and 2-9 percent of  $TiO_2$ ; with the total content of the above-stated components being equal to or more than 95 percent.

17. (Amended) The optical glass of claim 11 wherein said optical glass has the composition comprising, as essential components,  $P_2O_5$ ,  $B_2O_3$ ,  $WO_3$ ,  $Nb_2O_5$ ,  $TiO_2$ ,  $BaO$ ,

ZnO, Li<sub>2</sub>O, Na<sub>2</sub>O and K<sub>2</sub>O or the composition comprising the above essential components and Sb<sub>2</sub>O<sub>3</sub>.

35 18. (Amended) The optical glass of claim 108 wherein said optical glass has the composition comprising, as essential components, P<sub>2</sub>O<sub>5</sub>, B<sub>2</sub>O<sub>3</sub>, WO<sub>3</sub>, Nb<sub>2</sub>O<sub>5</sub>, TiO<sub>2</sub>, BaO, ZnO, Li<sub>2</sub>O, Na<sub>2</sub>O and K<sub>2</sub>O or the composition comprising the above essential components and Sb<sub>2</sub>O<sub>3</sub>.

19. (Amended) The optical glass of claim 109 wherein said optical glass has the composition comprising, as essential components, P<sub>2</sub>O<sub>5</sub>, B<sub>2</sub>O<sub>3</sub>, WO<sub>3</sub>, Nb<sub>2</sub>O<sub>5</sub>, TiO<sub>2</sub>, BaO, ZnO, Li<sub>2</sub>O, Na<sub>2</sub>O and K<sub>2</sub>O or the composition comprising the above essential components and Sb<sub>2</sub>O<sub>3</sub>.

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59. (Amended) The optical glass of claim 11 wherein said optical glass comprises 0-11 percent of BaO.

60. (Amended) The optical glass of claim 11 wherein said total quantity of Li<sub>2</sub>O, Na<sub>2</sub>O, and K<sub>2</sub>O is equal to or more than 29 percent.

61. (Amended) The optical glass of claim 11, wherein said optical glass has a density of oxygen atoms contained in the range of from  $4.2 \times 10^{22}$  to  $5.2 \times 10^{22}/\text{cm}^3$ .



62. (Amended) The optical glass of claim 108 wherein said optical glass has a density of oxygen atoms contained in the range of from  $4.2 \times 10^{22}$  to  $5.2 \times 10^{22}/\text{cm}^3$ .

B4 63. (Amended) The optical glass of claim 109 wherein said optical glass has a density of oxygen atoms contained in the range of from  $4.2 \times 10^{22}$  to  $5.2 \times 10^{22}/\text{cm}^3$ .

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65. (Amended) The optical glass of claim 11 wherein said optical glass comprises 2-30 molar percent of  $\text{Li}_2\text{O}$ .

66. (Amended) The optical glass of claim 11 wherein said optical glass does not comprise an amount of  $\text{GeO}_2$ .

B7 67. (Amended) The optical glass of claim 108 wherein said optical glass does not comprise an amount of  $\text{GeO}_2$ .

68. (Amended) The optical glass of claim 109 wherein said optical glass does not comprise an amount of  $\text{GeO}_2$ .

69. (Amended) The optical glass of claim 62 wherein said optical glass does not comprise an amount of  $\text{GeO}_2$ .

70. (Amended) The optical glass of claim 11 wherein said optical glass exhibits a glass transition temperature equal to and/or less than 530°C and a yield point temperature equal to or less than 580°C.

71. (Amended) The optical glass of claim 108 wherein said optical glass exhibits a glass transition temperature equal to and/or less than 530°C and a yield point temperature equal to or less than 580°C.

B21 72. (Amended) The optical glass of claim 109 wherein said optical glass exhibits a glass transition temperature equal to and/or less than 530°C and a yield point temperature equal to or less than 580°C.

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74. (Amended) The optical glass of claim 11 wherein said optical glass exhibits a refractive index in the range of from 1.7 to 2.0, an Abbé number in the range of from 20 to 32.

B28 75. (Amended) The optical glass of claim 108 wherein said optical glass exhibits a refractive index in the range of from 1.7 to 2.0, an Abbé number in the range of from 20 to 32.

B8 76. (Amended) The optical glass of claim 109 wherein said optical glass exhibits a refractive index in the range of from 1.7 to 2.0, an Abbé number in the range of from 20 to 32.

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78. (Amended) The optical glass of claim 11 wherein said optical glass exhibits a liquid phase temperature equal to or less than 970°C.

B9 79. (Amended) The optical glass of claim 108 wherein said optical glass exhibits a liquid phase temperature equal to or less than 970°C.

80. (Amended) The optical glass of claim 109 wherein said optical glass exhibits a liquid phase temperature equal to or less than 970°C.

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B10 85. (Amended) An optical part being composed of the optical glass of claim 12.

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87. (Amended) An optical part being composed of the optical glass of claim 17.

B11 88. (Amended) An optical part being composed of the optical glass of claim 60.

89. (Amended) An optical part being composed of the optical glass of claim 108.

90. (Amended) An optical part being composed of the optical glass of claim 109.

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95. (Amended) A glass preform being composed of the optical glass of claim 12.

97. (Amended) A glass preform being composed of the optical glass of claim 17.

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98. (Amended) A glass preform being composed of the optical glass of claim 60.

99. (Amended) A glass preform being composed of the optical glass of claim 108.

100. (Amended) A glass preform being composed of the optical glass of claim  
109.

105. (Amended) The optical glass of claim 108 wherein said optical glass  
comprises 0-11 percent of BaO.

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106. (Amended) The optical glass of claim 109 wherein said total quantity of  
Li<sub>2</sub>O, Na<sub>2</sub>O, and K<sub>2</sub>O is equal to or more than 29 percent.

Please add new claims 108, 109 and 110 as follows:

-- 108. (New) An optical glass comprising, as molar percentages, 17-30 percent of  
P<sub>2</sub>O<sub>5</sub>, 1-10 percent of B<sub>2</sub>O<sub>3</sub> (where the total quantity of P<sub>2</sub>O<sub>5</sub> and B<sub>2</sub>O<sub>3</sub> is 18-32 percent), 5-  
25 percent of WO<sub>3</sub>, 10-23 percent of Nb<sub>2</sub>O<sub>5</sub>, 1-9 percent of TiO<sub>2</sub> (where the total quantity  
of WO<sub>3</sub>, Nb<sub>2</sub>O<sub>5</sub> and TiO<sub>2</sub> is 28-40 percent), 5-22 percent Li<sub>2</sub>O, 4-22 percent Na<sub>2</sub>O, 0.5-7

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percent  $K_2O$  (where the total quantity of  $Li_2O$ ,  $Na_2O$ , and  $K_2O$  is 12-38 percent), 2-23 percent of  $BaO$ , 1-10 percent of  $ZnO$  (where the total quantity of  $BaO$  and  $ZnO$  is 3-25 percent), 0-8 percent of  $CaO$ , 0-8 percent of  $SrO$ , 0-4 percent of  $Al_2O_3$ , 0-4 percent of  $Y_2O_3$ , 0-1 percent of  $Sb_2O_3$ , and 0-1 percent of  $As_2O_3$ , where the total of all of these components is not less than 94 percent.

B15 109. (New) An optical glass comprising, as molar percentages, 14-32 percent of  $P_2O_5$ , 0.5-13 percent of  $B_2O_3$  (where the total quantity of  $P_2O_5$  and  $B_2O_3$  is 16-32 percent), 5-40 percent of  $WO_3$ , 5-23 percent of  $Nb_2O_5$ , 1-9 percent of  $TiO_2$  (where the total quantity of  $WO_3$ ,  $Nb_2O_5$  and  $TiO_2$  is 25-42 percent), 5-27 percent  $Li_2O$ , 3-27 percent  $Na_2O$ , 0.5-7 percent  $K_2O$  (where the total quantity of  $Li_2O$ ,  $Na_2O$ , and  $K_2O$  is 12-43 percent), 0-23 percent of  $BaO$ , 0-17 percent of  $ZnO$  (where the total quantity of  $BaO$  and  $ZnO$  is 0-25 percent), 0-8 percent of  $CaO$ , 0-8 percent of  $SrO$ , 0-4 percent of  $Al_2O_3$ , 0-4 percent of  $Y_2O_3$ , 0-1 percent of  $Sb_2O_3$ , and 0-1 percent of  $As_2O_3$ , where the total of all of these components is not less than 94 percent.

110. (New) The optical glass of claim 108 wherein said total quantity of  $Li_2O$ ,  $Na_2O$ , and  $K_2O$  is equal to ore more than 29 percent. --

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